

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application. Please cancel claims 1-26 and replace those claims with new claims 27-55.

Listing of the claims

1. (Canceled)
2. (Canceled)
3. (Canceled)
4. (Canceled)
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19. (Canceled)
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21. (Canceled)
22. (Canceled)
23. (Canceled)
24. (Canceled)
25. (Canceled)
26. (Canceled)
27. (New) A medical laser system for applying laser energy to a target ophthalmic tissue of a human for medical purposes, the improvement comprising:
 - a first source of green laser light;
 - a first light path associated with the first source;
 - a second source of yellow laser light;
 - a second light path associated with the second source;
 - a third source of red laser light;
 - a third light path associated with the third source;
 - a controller to control the activation of any of the first, the second and the third laser light sources;
 - an optical configuration to selectively align any of the first, the second and the third light paths along a common axis;
 - an output port to receive the aligned light beam from the common axis; and
 - wherein the light from the output port is directed to a target ophthalmic tissue.
28. (New) The laser system of claim 27 wherein the first source of green laser light has a wavelength of about 532 nm.
29. (New) The laser system of claim 27 wherein the second source of yellow laser light has a wavelength of about 561 nm.

30. (New) The laser system of claim 27 wherein the third source of red laser light has a wavelength of about 659 nm.

31. (New) The laser system of claim 27 wherein that tissue is targeted for photocoagulation purposes.

32. (New) The laser system of claim 27 wherein the output port is directed to an ophthalmoscope.

33. (New) The laser system of claim 27 wherein the output port is directed to a slit-lamp assembly.

34. (New) The laser system of claim 27 wherein the output port is directed to an endophotocoagulation probe.

35. (New) A method of treating ophthalmic tissue of a human being with a laser system, comprising the steps of:

providing first, second and third sources of green laser light, yellow laser light and red laser light, respectively;

providing light paths associated with each of the laser light sources;

providing a controller to control the activation of any of the first, second and third laser light sources to the ophthalmic tissue depending on the type of treatment;

providing an optical configuration to align the light paths of the one or more of the laser light sources; and

providing an output port to receive the selected activated laser light beam and direct the beam to the ophthalmic tissue of a human being.

36. (New) The system of claim 27, wherein at least one of said sources of laser light comprises a primary laser section and a frequency doubling section.

37. (New) The system of claim 27, wherein at least one of said sources of laser light comprises a pump diode laser source.
38. (New) The system of claim 27, wherein said optical configuration comprises at least one fold mirror.
39. (New) The system of claim 27, wherein said optical configuration comprises one or more combiner mirrors to combine the light paths.
40. (New) The system of claim 27, comprising a plurality of optical ports associated with the output of said optical configuration.
41. (New) The method of claim 35, further comprising delivering an aiming beam substantially along said aligned light path.
42. (New) The method of claim 35, comprising channeling said two or more laser light paths via one or more optical ports.
43. (New) The method of claim 35, comprising delivering said laser light paths using one or more delivery systems.
44. (New) The apparatus of claim 27, comprising a moving attenuator to attenuate at least one of said sources of laser light.
45. (New) The apparatus of claim 27, comprising at least one power-monitoring detector to detect the power of at least one of said sources of laser lights on said common axis.
46. (New) The apparatus of claim 27, comprising at least one pickoff mirror to reflect at least one or more of said sources of laser light to a diffuser.
47. (New) The apparatus of claim 27, comprising a safety shutter to limit the exposure of said target ophthalmic tissue to one or more of said sources of laser light.

48. (New) The apparatus of claim 27, comprising an aiming beam to enable aiming of said aligned light beam towards the target ophthalmic tissue.
49. (New) The method of claim 35, further comprising:
selecting one of said first, second and third laser light sources;
selecting laser exposure settings for the selected laser light source; and
activating the selected laser source to generate a light beam.
50. (New) The method of claim 49, further comprising:
providing a detector in one or more of said light paths;
processing feedback from the detector, for said generated light beam; and
validating accuracy of the actual power output of said generated light beam.
51. (New) The method of claim 35, wherein the first source of green laser light has a wavelength of about 532 nm.
52. (New) The method of claim 35, wherein the second source of yellow laser light has a wavelength of about 561 nm.
53. (New) The method of claim 35, wherein the third source of red laser light has a wavelength of about 659 nm.
54. (New) The apparatus of claim 27, further comprising:
a selector for selecting one of said first, second and third laser light sources;
a selector for setting laser exposure settings for the selected laser light source; and
an activator to cause the selected laser source to generate a light beam.
55. (New) The apparatus of claim 54, further comprising:
a detector positioned in one or more of said light paths;
a feedback circuit for processing detected light from the laser light source; and
a circuit for validating the accuracy of the actual power output of the generated light beam.